

Fact Sheet

National Institute of Biomedical Imaging and Bioengineering

DIAGNOSTIC AND INTERVENTIONAL ULTRASOUND PROGRAM AREA



NIBIB CONTACT

Dr. Hector Lopez
Health Scientist
Administrator
Division of Applied
Science & Technology
301-451-4780
e-mail:
lopezh@mail.nih.gov



Introduction

The National Institute of Biomedical Imaging and Bioengineering, the newest component of the National Institutes of Health, leads the development and accelerates the application of biomedical technologies. The Institute is committed to integrating the physical and engineering sciences with the life sciences to advance basic research and medical care.

The primary focus of this program is the improvement of technologies for diagnostic, interventional and therapeutic uses of ultrasound. The diagnostic ultrasound program includes, but is not limited to the design, development and construction of transducers, transducer arrays, and transducer materials, innovative image acquisition and display methods, innovative signal processing methods and devices, and optoacoustic and thermoacoustic technology. It also includes the development of image-enhancement devices and methods, such as contrast agents, image and data presentation and mapping methods, such as functional imaging and image fusion.

The interventional ultrasound program includes the use of ultrasound for therapeutic use, or as an adjunct for enhancement of non-ultrasound therapy applications. Examples include, but are not limited to, high-intensity focused ultrasound (HIFU) as a non-invasive or minimally invasive interventional surgical or therapy tool, and as an adjunct interventional tool. It also includes the use of ultrasound contrast agents for therapy and for targeted drug delivery, and the use of ultrasound for image-guided surgery, biopsy, and other interventions.

Relevant Study Sections

- Bioengineering, Technology and Surgical Science (BTSS)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/SBIBIRG/BTSS.htm>)
- Biomedical Imaging Technology (BMIT)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/SBIBIRG/BMIT.htm>)
- Instrumentation and Systems Development (ISD)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/BSTIRG/ISD.htm>)
- Medical Imaging (MEDI)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/SBIBIRG/MEDI.htm>)
- Microscopic Imaging (MI)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/BSTIRG/MI.htm>)
- Small Business Biomedical Imaging (SBMI)
(<http://cms.csr.nih.gov/PeerReviewMeetings/CSRIRGDescription/SBIBIRG/SBMI.htm>)

A complete listing of review groups and study sections can be found at the Center for Scientific Review (<http://cms.csr.nih.gov/PeerReviewMeetings/>).

Program staff recommend that applicants include a cover letter listing areas of scientific expertise needed to review the application and how the expertise should be balanced (please do not include names), or potential study section assignments. Questions may be directed to the NIBIB contact mentioned above.

Funding Opportunities

The NIBIB supports a coordinated program of research and research training that can be applied across a broad spectrum of biological processes, disorders, and diseases. Potential applicants for NIBIB grants are strongly encouraged to discuss their proposed projects with the scientific staff of the Institute prior to preparing an application. Individuals can obtain guidance on the suitability of the project and the most appropriate funding mechanism or opportunity for the proposed research. The Institute supports research through a variety of NIH grant mechanisms such as:

- **R01** - Research project grant to support investigator-initiated research projects.
- **R03** - Research grant to support projects requiring small amounts of funding for limited periods of time.
- **R13** - Conference grant to support high-quality scientific meetings, conferences, and workshops.
- **R21** - Exploratory and development grant to support projects that explore novel concepts.
- **R43/R44 and R41/R42** - Small Business Innovation Research and Small Business Technology Transfer awards that support exploration of ideas that may ultimately lead to commercial products or services.

Specific areas of scientific interest are publicized through program announcements (PA) and requests for applications (RFA). Additional information on current opportunities available at the NIBIB can be found by searching the Funding Opportunities Database on the NIBIB website at:

<http://www.nibib.nih.gov/publicPage.cfm?Section=funding&Action=Search>.

NIH Roadmap Opportunities

The NIH Roadmap is a series of far-reaching initiatives designed to build on the progress in medical research achieved through the recent doubling of the NIH budget. The Roadmap focuses on three main areas: new pathways to discovery, research teams of the future, and re-engineering the clinical research enterprise.

Additional information on NIH Roadmap initiatives can be found on the NIH website at:

<http://nihroadmap.nih.gov>.

Looking to the Future

New and exciting programs are under development at the NIBIB. Up-to-date information on funding opportunities, workshops, and conferences can be found on the NIBIB website.

NIBIB Contacts

You may contact NIBIB program staff with your questions about funding opportunities or the application process. We welcome the opportunity to speak with potential applicants about the Institute's programs. Areas of scientific coverage for each member of the program staff can be found on the NIBIB website at:

<http://www.nibib.nih.gov/publicPage.cfm?pageID=2429>.